AMENDMENTS TO THE SPECIFICATION

Dated: March 16, 2004

Please add the following priority statement on page 1, just after the title and before the first line of the specification:

-- This application is the National Stage of PCT/DE99/03506, filed November 3, 1999. --

On page 8, please replace the paragraph beginning at line 17 with the following amended paragraph:

-- Figure 3 (SEQ ID NOS: 3-10) shows the conservation of the amino acid sequence between various HBV subtypes as well as the hydropathy profile profiles of the HBV subtypes. FIG. 3A (top) provides a table of nucleotide sequences, amino acid sequences and hydropathy values (according to Kyte and Doolittle, 1982) for the PreS2-TLM peptide of HBV subtype ayw (1) (SEQ ID NO: 2) compared to subtypes ayw (2) (SEQ ID NO: 4), adr (1) / adr (2) / ayr (SEQ ID NO: 6), and adw / adw2 (SEQ ID NO: 8); the amino acid residues and hydropathy values of SEQ ID NO: 2 are shown in bold face, as are the amino acid residues and hydropathy values of SEQ ID NOS: 4, 6, and 8 that are identical to the corresponding residues in SEQ ID NO: 2; panel (a) graphically depicts the hydropathy profile of SEQ ID NO: 4 (in black) compared to SEQ ID NO: 2 (in grey). In FIG. 3B, panel (b) graphically depicts the hydropathy profile of SEQ ID NO: 6 (in black) compared to SEQ ID NO: 2 (in grey), and panel (c) graphically depicts the hydropathy profile of SEQ ID NO: 8 (in black) compared to SEQ ID NO: 2 (in grey). In the graphs of FIG. 3A and 3B, the hydropathy values of the amino acid side chains are plotted on the yaxis and the 12 amino acid residues of the peptides are plotted on the x-axis, with the N-terminal amino acid being labeled 1; hydrophobic amino acids have positive hydropathy values and hydrophilic amino acids have negative hydropathy values. --

paragraph:

On page 8, please replace the paragraph beginning at line 20 with the following amended

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(SEQ ID NOS: 11-16) shows amphiphilic motives motifs in the PreS2 region of --Figure 4 various avian hepadnaviruses. FIG. 4A (top) provides a table of amino acid sequences and hydropathy values (according to Kyte and Doolittle, 1982) for the PreS2 region HBV subtype ayw (1) (SEQ ID NO: 2) compared to DHBV residues 20-31 (SEQ ID NO: 9), DHBV residues 42-53 (SEQ ID NO: 10), and HHBV residues 45-56 (SEQ ID NO:11); panel (a) graphically depicts the hydropathy profile of SEQ ID NO: 9 (in black) compared to SEQ ID NO: 2 (in grey). In FIG. 4B, panel (b) graphically depicts the hydropathy profile of SEQ ID NO: 10 (in black) compared to SEQ ID NO: 2 (in grey), and panel (c) graphically depicts the hydropathy profile of SEQ ID NO: 11 (in black) compared to SEQ ID NO: 2 (in grey). In the graphs of FIG. 4A and 4B, the hydropathy values of the amino acid side chains are plotted on the y-axis and the 12 amino acid residues of the peptides are plotted on the x-axis, with the N-terminal amino acid being labeled 1; hydrophobic amino acids have positive hydropathy values and hydrophilic amino acids have negative hydropathy values. --

On page 8, please replace the paragraph beginning at line 22 with the following amended paragraph:

--Figure 5 (SEQ ID NOS: 11-16) shows amphiphilic-motivesmotifs in the PreS2 region of various hepadnaviruses of rodents. FIG. 5 (top) provides a table of amino acid sequences and hydropathy values (according to Kyte and Doolittle, 1982) for the PreS2 region HBV subtype ayw (1) (SEQ ID NO: 2) compared to WHV residues 33-44 (SEQ ID NO: 12) and GSHV residues 33-44 (SEQ ID NO: 13); panel (a) graphically depicts the hydropathy profile of SEQ ID NO: 13 (in white) and SEQ ID NO: 12 (in black) compared to SEQ ID NO: 2 (in grey). In the graph, the hydropathy values of the amino acid side chains are plotted on the y-axis and the 12 amino acid residues of the peptides are plotted on the x-axis, with the N-terminal

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amino acid being labeled 1; hydrophobic amino acids have positive hydropathy values and hydrophilic amino acids have negative hydropathy values. --

Please amend the specification to enter the revised Sequence Listing submitted herewith.